

**What is claimed is**

1. A communication system for transmission of optical signals, that are transmitted in wavelength-division multiplex with different wavelengths via optical fibres, in which communication system, in at least one network node of the communication system, there exist at least one line unit to which the optical fibres are connected, and a cross-connector, in which communication system the cross-connector is connected to the line unit via optical interfaces and in which communication system signals of the same wavelength are fed by the line unit to two inputs of the cross-connector or are delivered to the line unit by two outputs of said cross-connector, wherein only one of the corresponding transmission paths is used, wherein
- the signals of each wavelength are delivered by the line unit on one path only to a passive splitter, which doubles the respective signal and feeds it on separate paths to the two inputs of the cross-connector, and
  - outputs of the cross-connector are fed on separate paths to a coupler, via which the two paths are combined into one transmission path which is connected to one input of the line unit to which a colour laser corresponding to the respective wavelength of the optical signals is connected.

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